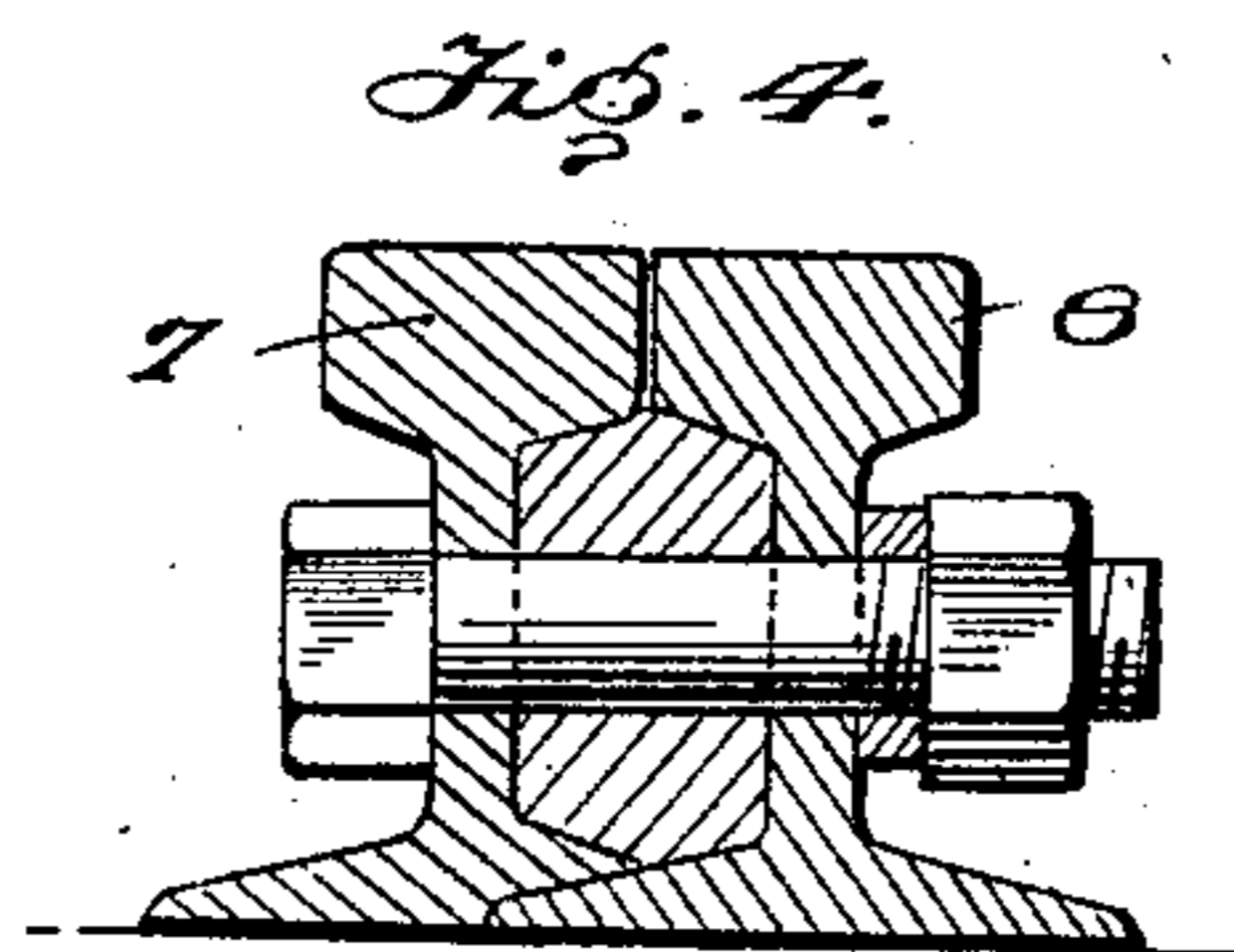
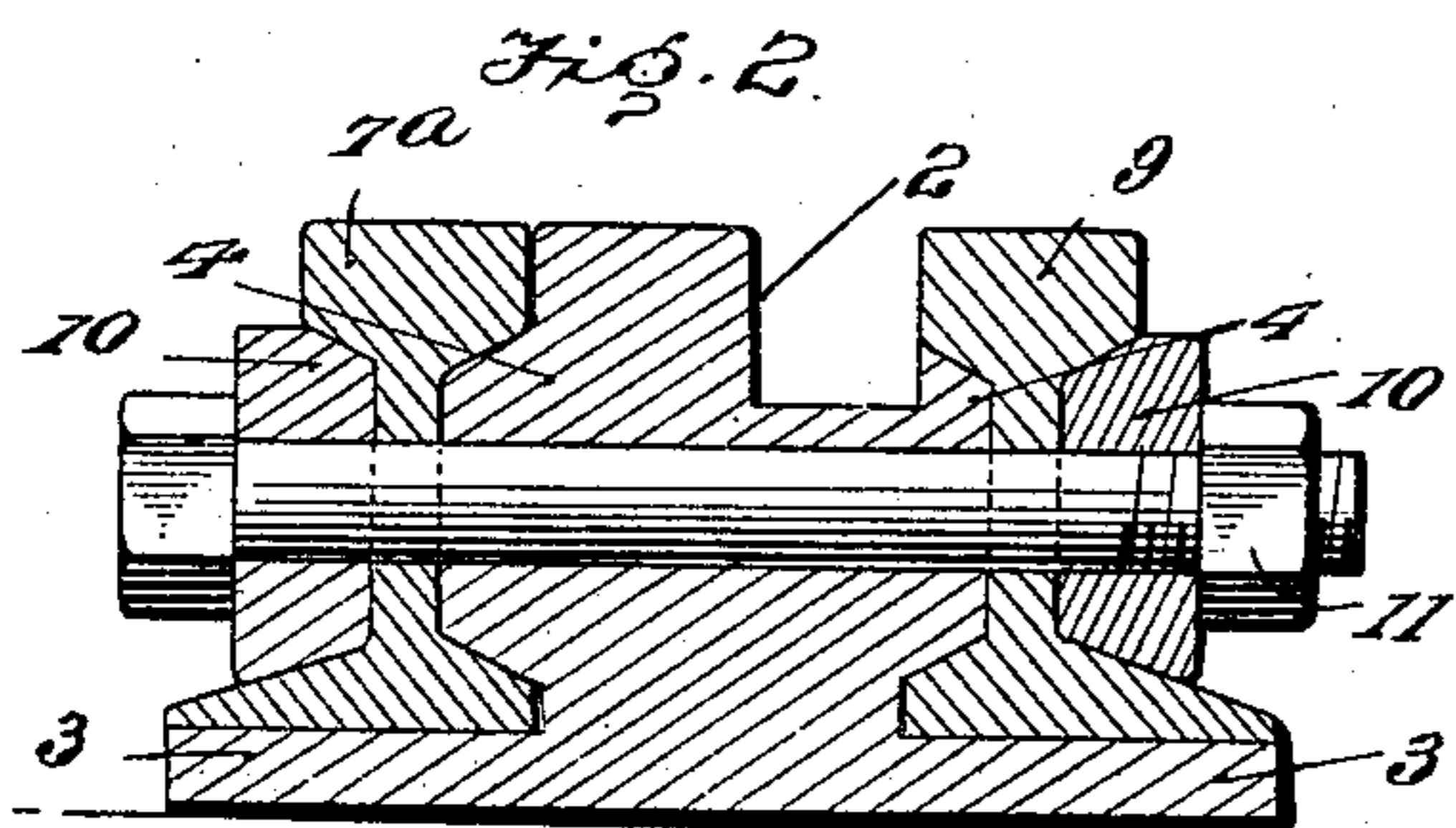
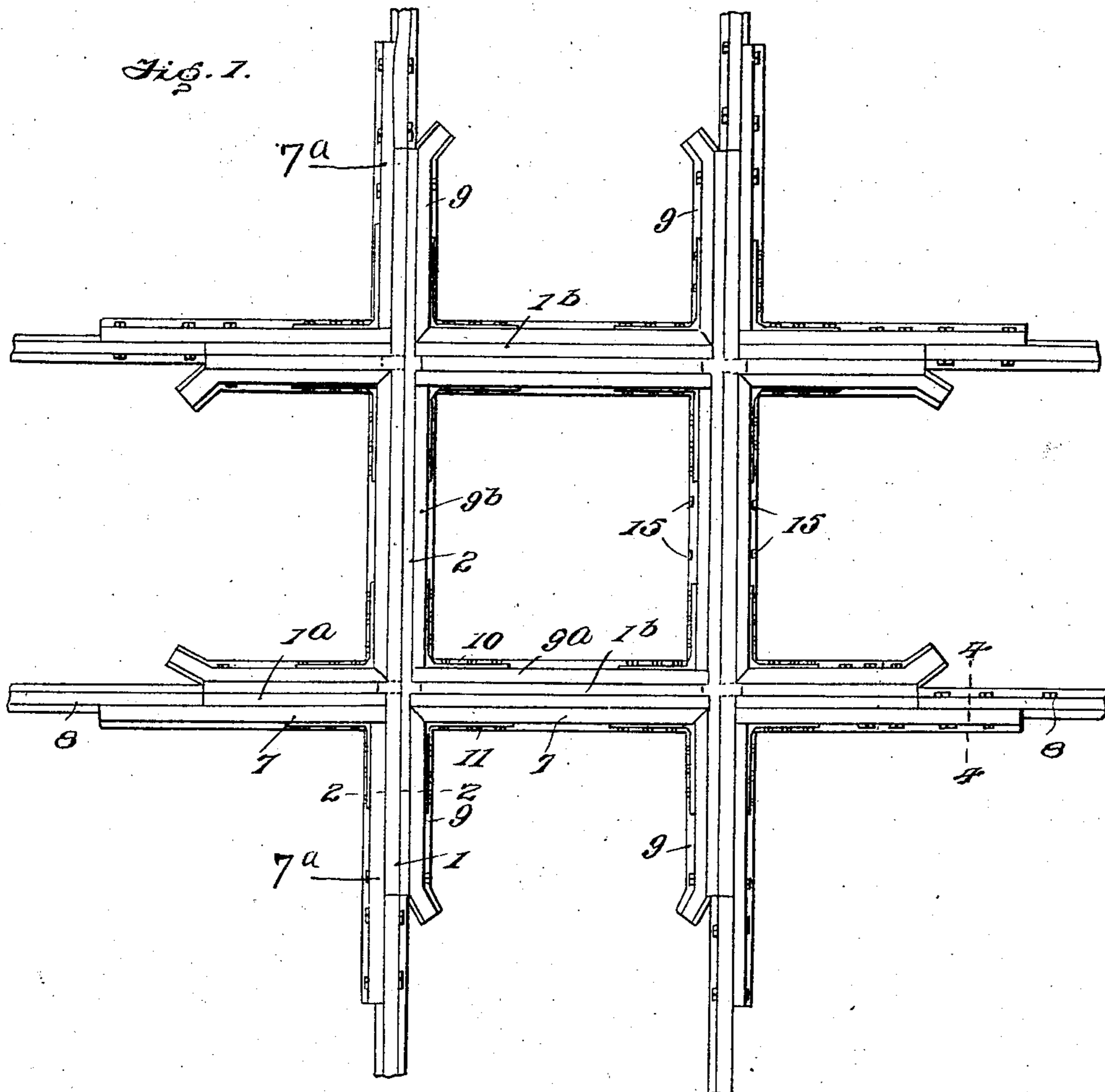


No. 877,340.

PATENTED JAN. 21, 1908.

A. HOSMER.
RAILWAY CROSSING.
APPLICATION FILED OCT. 17, 1907.

2 SHEETS—SHEET 1.



Witnesses

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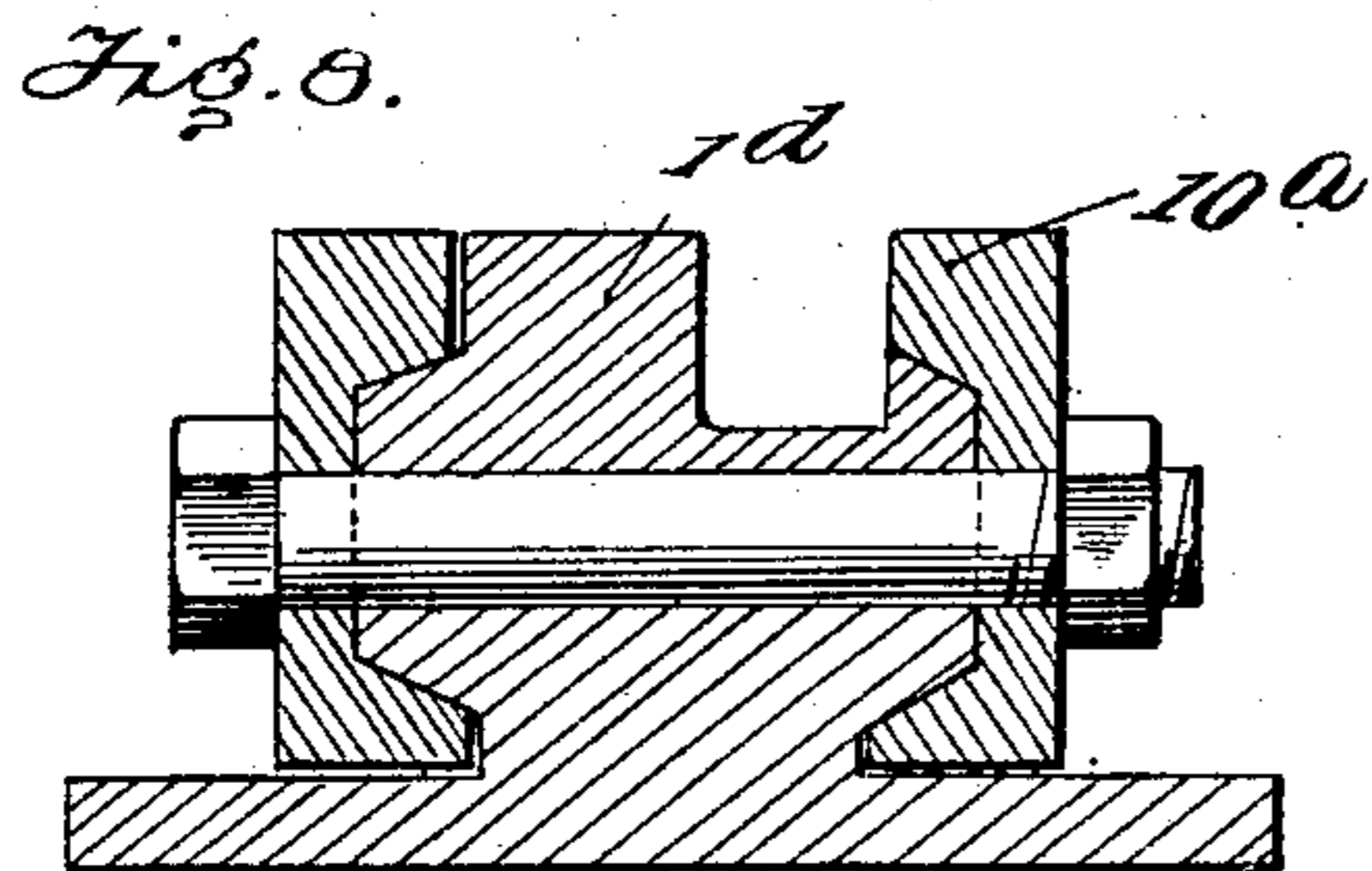
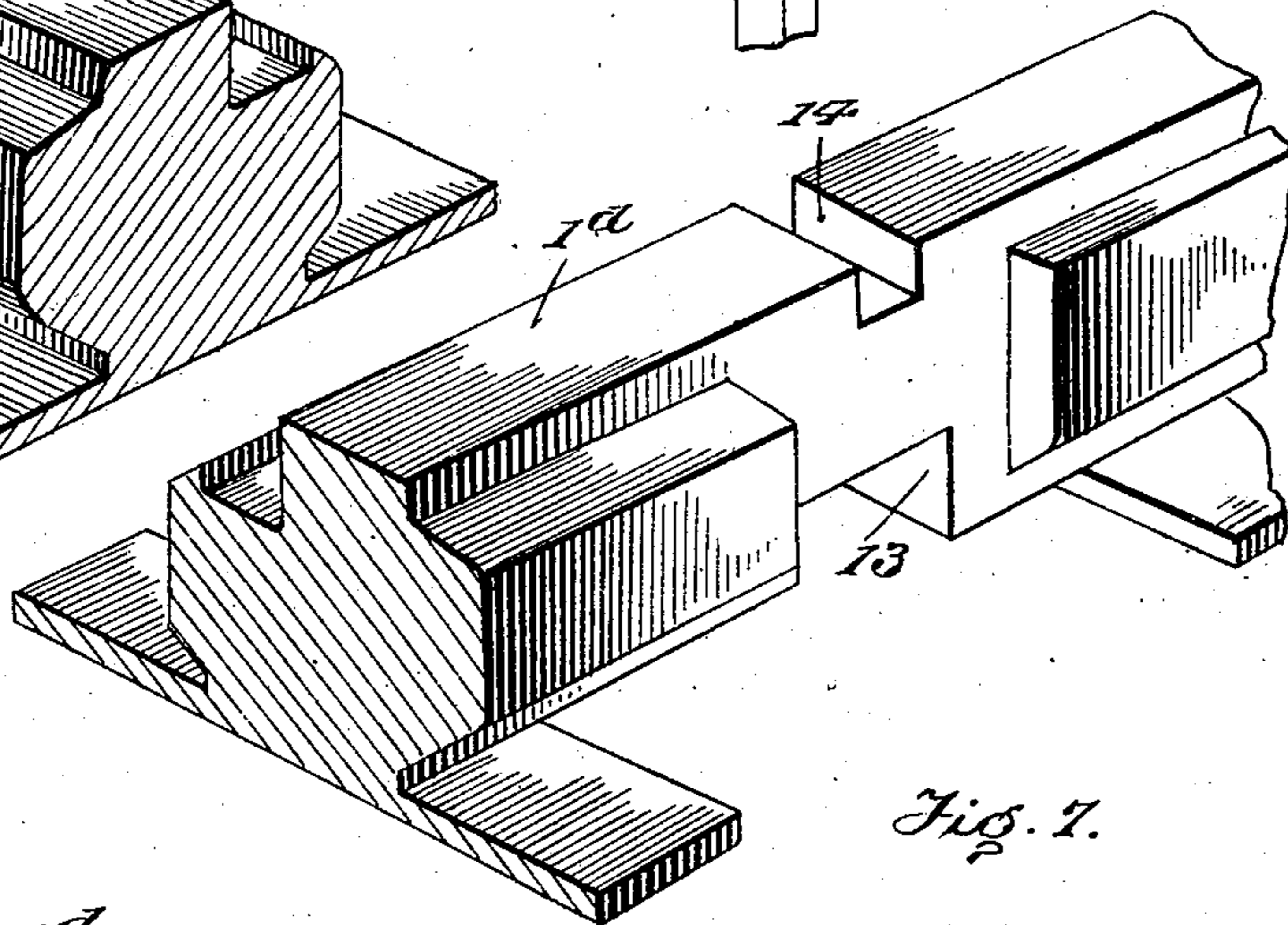
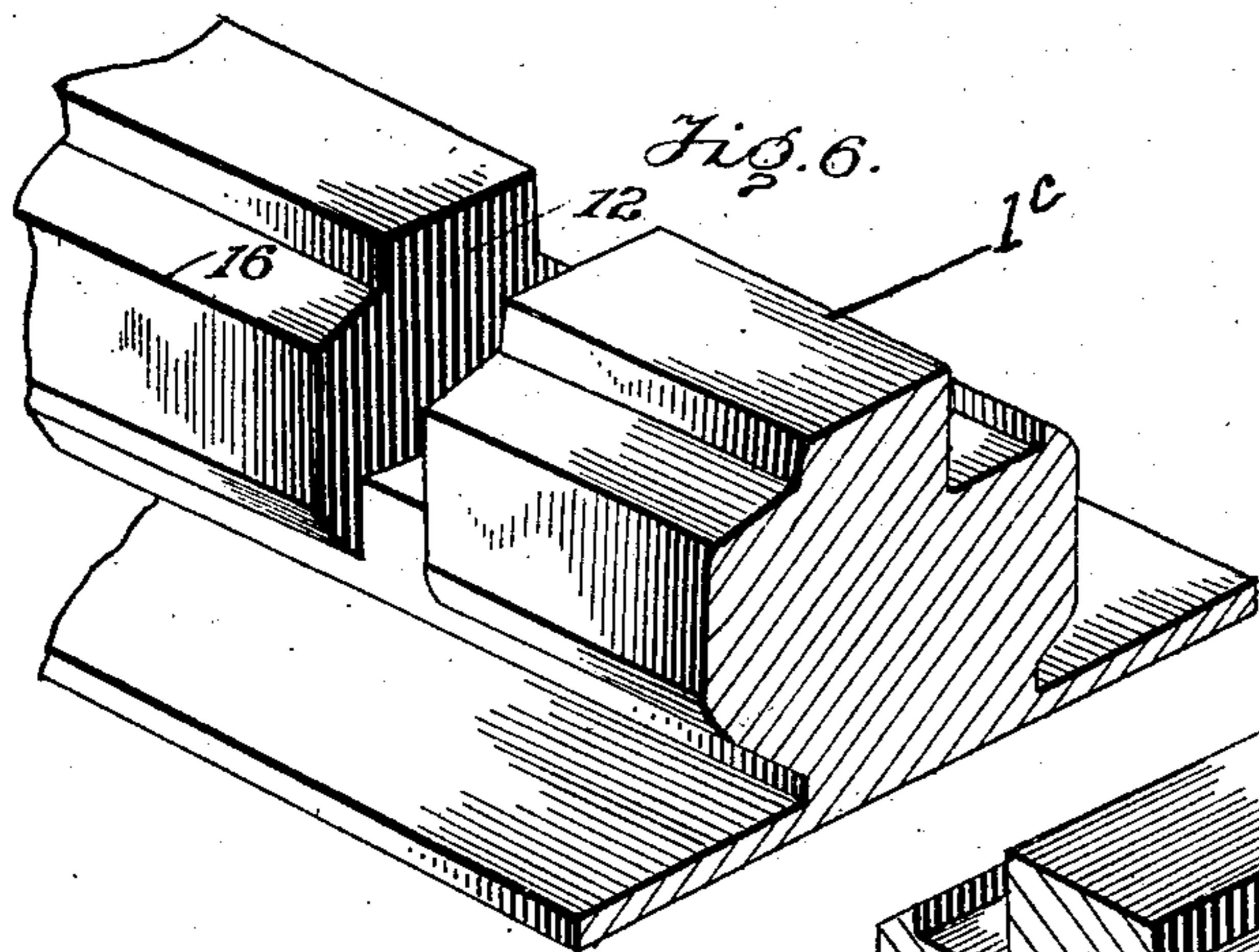
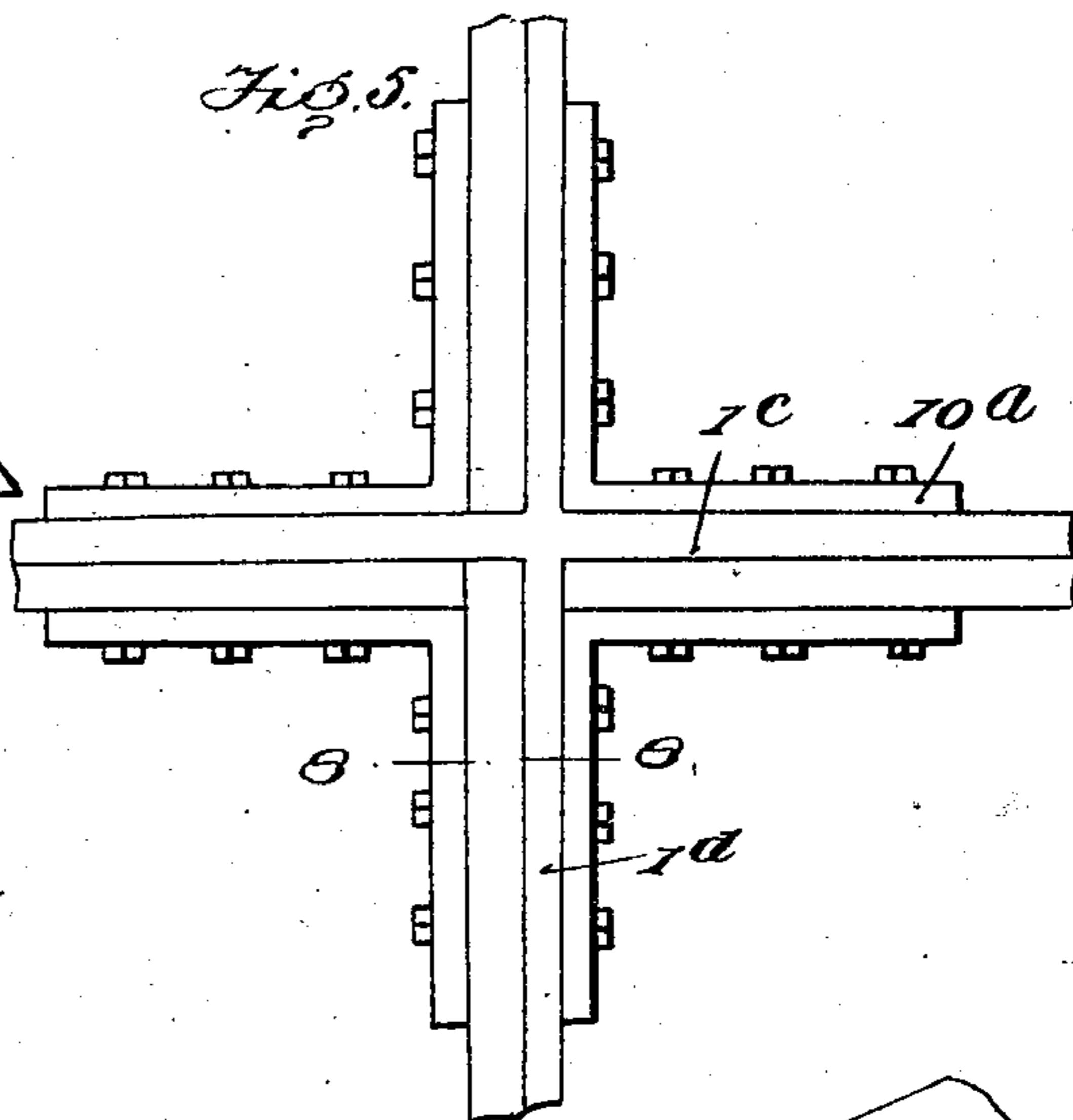
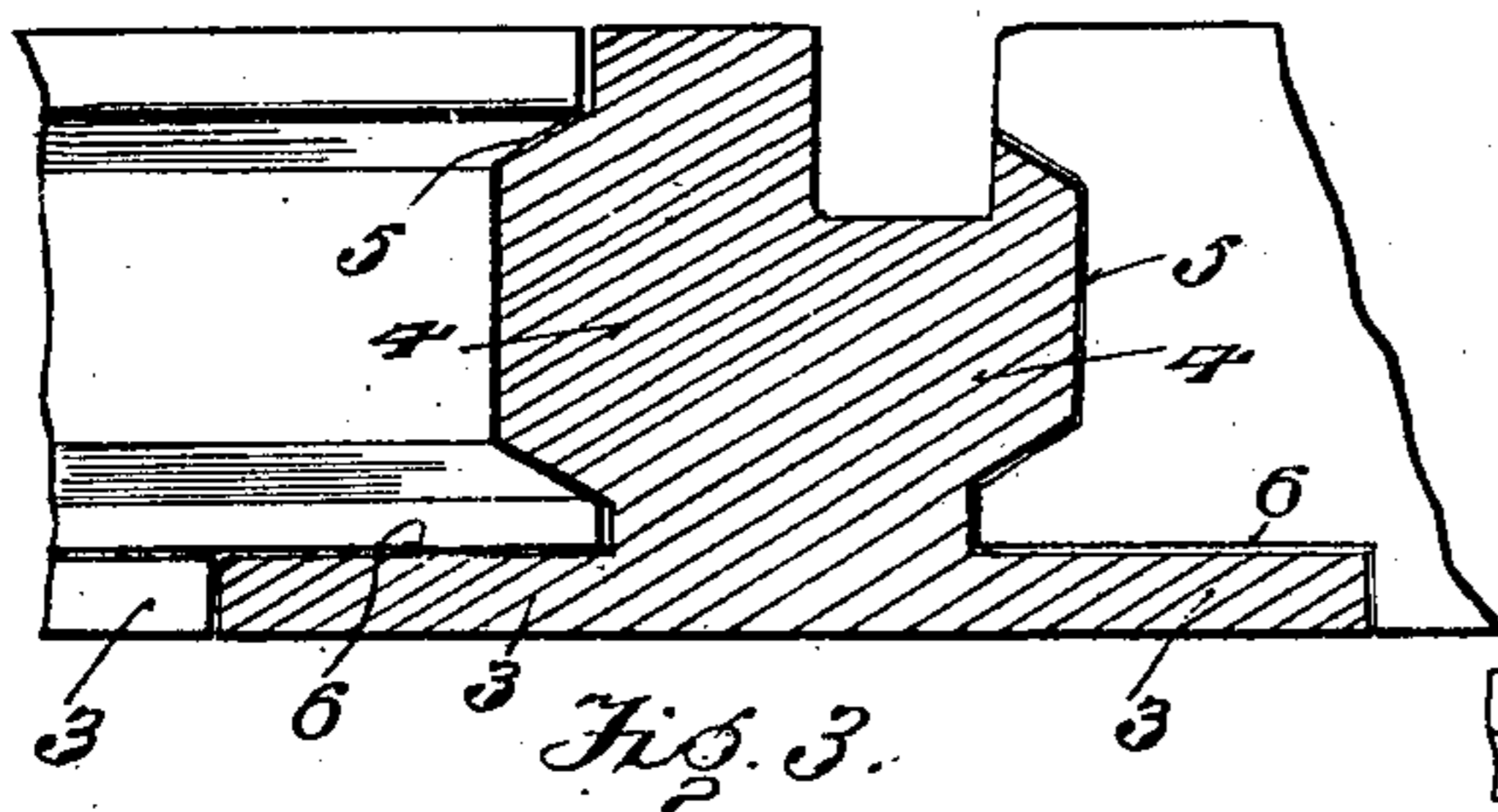
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2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

ARTHUR HOSMER, OF FORT WORTH, TEXAS.

RAILWAY-CROSSING.

No. 877,340.

Specification of Letters Patent.

Patented Jan. 21, 1908.

Application filed October 17, 1907. Serial No. 397,933.

To all whom it may concern:

Be it known that I, ARTHUR HOSMER, a citizen of the United States, residing at Fort Worth, in the county of Tarrant and State of Texas, have invented certain new and useful Improvements in Railway-Crossings, of which the following is a specification.

The present invention relates to improvements in railway crossings and resides principally in the provision of a peculiar crossing rail and novel means for connecting the crossing rails of the intersecting tracks and securing the reinforcing and guard rails thereto.

One of the objects of the invention is to design a railroad crossing comprising few and durable parts which can be constructed and maintained cheaply and without the aid of special tools and which will be stronger and more efficient and last much longer than the railroad crossings in general use.

A further object of the invention is to obviate the necessity for employing filling blocks between the crossing rails and the reinforcing and guard rails applied thereto.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction and the means for effecting the result, reference is to be had to the following description and accompanying drawings—in which:

Figure 1 is a plan view of a railway crossing embodying the invention. Fig. 2 is an enlarged sectional view on the line 2—2 of Fig. 1. Fig. 3 is a transverse sectional view through one of the through crossing rails showing the manner of connecting the sections of the intersecting crossing rails thereto. Fig. 4 is an enlarged sectional view on the line 4—4 of Fig. 1. Fig. 5 is a plan view of one of the corners of a crossing showing a modification. Fig. 6 is a detail perspective view of one of the crossing rails shown in Fig. 5. Fig. 7 is a similar view of the opposite crossing rail. Fig. 8 is an enlarged sectional view on the line 8—8 of Fig. 5.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

Specifically describing the embodiment of the invention shown in the first four figures of the drawings, the numerals 1 designate the through rails of one of the tracks, and the said rails are continuous in length and extend

entirely through the crossing. The crossing rails of the intersecting track comprise the outer sections 1^a and the inner sections 1^b, the ends of the said sections fitting closely against the through crossing rails 1. These crossing rails are provided in their upper face with the usual groove 2 for receiving the flanges of the car wheels and are also formed with the oppositely extending basal flanges 3 as shown more clearly in Fig. 2, the said basal flanges serving as a support for the guard rails and reinforcing rails. It will also be observed that longitudinal ribs 4 project outwardly upon opposite sides of the crossing rails, the said ribs being designed to fit between the head and flange of the reinforcing and guard rails and to thereby obviate the necessity of employing filling blocks.

The ends of the crossing rail sections 1^a and 1^b abutting against the through crossing rails 1 have the extremities thereof notched at 5 as indicated more clearly in Fig. 3 to receive the ribs 4 of the through rails, while their lower portions are cut away as indicated at 6 to receive the basal flanges 3. With this construction a rigid interlocking connection is produced between all of the crossing rails and the same are securely held against relative vertical displacement due to the hammering of the wheels of the rolling stock. Extending along the outer side of each of the crossing rail sections 1^a is a reinforcing rail 7, the outer end of which is bolted or otherwise rigidly connected to the track rail 8 while the inner end has the web thereof notched to receive the rib 4 of the through rail 1 against which it abuts, the head of the reinforcing rail resting upon the said rib while the base of the reinforcing rail rests upon the basal flange of the through rail. A similar reinforcing rail 7^a is applied to each end of the through rails 1, the inner end of the said reinforcing rail 7^a abutting against the before mentioned reinforcing rail 7. Guard rails 9 are applied to the inner sides of the through crossing rails 1 at the opposite ends thereof and have their inner extremities beveled and in engagement with the correspondingly beveled ends of a reinforcing rail section 7^b applied to the crossing rails 1^b. Guard rails 9^a fit against the inner sides of the crossing rail sections 1^b and have the web portions of their extremities notched to receive the ribs 4 of the through rails 1,

the ends of the guard rails resting upon the basal flanges of the said through rails. Similar guard rails 9^b extend along the intermediate portions of the through rails 1 and have their ends abutting against the before mentioned rails 9^a. Angle pieces 10 are fitted within the various corners of the crossing and bolts 11 coöperate with the same to lock the various members of the crossing in position.

10 A modification of the invention is shown in Figs. 5 to 8 in which the crossing rails 1^c and 1^d are both continuous and are provided with corresponding notches so as to fit together to form a tight joint. These crossing
15 rails are identical in cross section with those previously described, being provided with oppositely extending basal flanges for the support of the guard and reinforcing rails and being also provided upon their sides
20 with the longitudinal ribs designed to engage the web portion of the reinforcing and guard rails and to thereby obviate the necessity for employing filling blocks. The rail section 1^c has the upper portion thereof notched
25 at 12 Fig. 6 while the lower portion of the rails 1^d is notched at 13, Fig. 7, the said rails being fitted together so that the upper faces thereof lie in the same plane. It will also be observed that the top of the rail section 1^d is provided with a transverse notch
30 14 Fig. 7 adapted to aline with the groove in the rail section 1^c Fig. 6 for receiving the flanges of the car wheels. With this construction the angle pieces 10^a have a channel
35 formation, the longitudinal ribs of the rails fitting between the flanges at the top and bottom thereof. If found desirable the regular running rail and guard rails may be notched as indicated at 15 Fig. 1 to allow
40 the spikes to pass through these flanges for engagement with the basal flange, by means of which the crossing is secured to the ties.

Having thus described the invention, what is claimed as new is:

45 1. A crossing rail provided with a longitudinal rib for engaging the web portion of a reinforcing rail and also formed with a basal flange adapted to extend under the reinforcing rail to support the same.

50 2. A crossing rail provided upon its opposite sides with longitudinal ribs for engaging the web portion of reinforcing and guard rails, and also provided with oppositely extending basal flanges for supporting the said
55 rails.

3. A railway crossing comprising a through crossing rail provided upon its opposite sides with longitudinal ribs, intersecting crossing rail sections having the ends thereof notched
60 to receive the ribs of the through rail, and means for locking the rail sections together.

4. A railway crossing comprising a through crossing rail, an intersecting crossing rail, reinforcing rails applied to the crossing rails,
65 the said crossing rails embodying means for

supporting the reinforcing rails and producing an interlocking connection therewith, and means for locking the rails together.

5. A railway crossing comprising a through crossing rail provided upon its opposite sides
70 with longitudinal ribs and also with oppositely extending basal flanges, intersecting crossing rail sections abutting against the through crossing rail, the ends of the intersecting crossing rails being notched to receive
75 the ribs of the through rail and cut away to receive the basal flanges of the through rail, and means for locking the rails together.

6. A railway crossing comprising a through
80 crossing rail provided upon its opposite sides with longitudinal ribs and also with basal flanges, intersecting crossing rail sections abutting against the through crossing rail and also provided with longitudinal ribs and
85 basal flanges, reinforcing and guard rails applied to the crossing rails, the said reinforcing and guard rails resting upon the basal flanges and having an interlocking connection with the ribs, and means for securing
90 the rails together.

7. A railway crossing comprising a through crossing rail, intersecting crossing rail sections abutting against the through crossing rail, the said crossing rails being provided
95 with longitudinal ribs and basal flanges and the ends of the intersecting crossing rail sections being notched to receive the ribs of the through rail and cut away to receive the basal flanges of the through rail, reinforcing and guard rails applied to the crossing rails, the said reinforcing and guard rails resting upon the basal flanges of the crossing rail and having an interlocking connection
100 with the ribs of the crossing rails, and means for securing the rails together.

8. A railway crossing comprising a through crossing rail, intersecting crossing rail sections abutting against the through rail, the said crossing rails being formed with longitudinal ribs and basal flanges and the intersecting crossing rail sections having the ends thereof notched to receive the ribs of the through rail and cut away to receive the basal flanges of the through rail, guard and
110 reinforcing rails applied to the crossing rails, the said guard and reinforcing rails resting upon the flanges of the crossing rail and having an interlocking connection with the ribs of the crossing rails, angle pieces fitted to the corners of the crossing, and bolts coöperating with the angle pieces to lock the rails together.

9. In a railway crossing, the combination of a pair of intersecting rails, the said rails
125 being provided upon their sides with longitudinal ribs and one of the rails having the lower portion thereof notched while the opposite rail has the upper portion thereof notched, and angle pieces of channel forma- 130

tion for receiving the ribs upon the sides of the rails.

10. In a railway crossing, the combination of a pair of intersecting rails, the said rails
5 being provided upon their opposite sides with basal flanges and longitudinally extending ribs, the upper portion of one of the rails being notched while the lower portion of the opposite rail is correspondingly notched, and
10 angle pieces resting upon the basal flanges,

the said angle pieces having a channel formation to receive the before mentioned longitudinal ribs.

In testimony whereof I affix my signature in presence of two witnesses.

ARTHUR HOSMER. [L. s.]

Witnesses:

J. D. COLLETT,
O. C. JONES.